

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

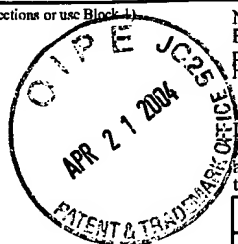
**Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax (703) 746-4000**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

22907 7590 02/13/2004

**BANNER & WITCOFF**  
**1001 G STREET N W**  
**SUITE 1100**  
**WASHINGTON, DC 20001**



Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below:

|                    |
|--------------------|
| (Depositor's name) |
| (Signature)        |
| (Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/981,356      | 10/12/2001  | Bert Vogelstein      | 001107.00195        | 8732             |

TITLE OF INVENTION: DIGITAL AMPLIFICATION

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE        | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|------------------|-----------------|------------------|------------|
| nonprovisional | <b>YES</b>   | \$130 <b>665</b> | \$300           | <b>630 665</b>   | 05/13/2004 |

| EXAMINER      | ART UNIT | CLASS-SUBCLASS |
|---------------|----------|----------------|
| SIEW, JEFFREY | 1637     | 435-006000     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

Banner &amp; Witcoff, Ltd.

2 \_\_\_\_\_  
 3 \_\_\_\_\_

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

The Johns Hopkins University

Baltimore, MD

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☒ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☒ Publication Fee  
☒ Advance Order - # of Copies 10

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 19-0733 (enclose an extra copy of this form).

Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

*Sarah A. Kagan*  
 Sarah A. Kagan, Reg. No. 32,141 4/21/2004

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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04/22/2004 CCHAU2 00000135 190733 09981356

01 FC:2501 665.00 DA  
 02 FC:1504 300.00 DA  
 03 FC:8001 30.00 DA

TRANSMIT THIS FORM WITH FEE(S)

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 995

## Complete if Known

|                      |                  |
|----------------------|------------------|
| Application Number   | 09/981,356       |
| Filing Date          | October 12, 2001 |
| First Named Inventor | Bert VOGELSTEIN  |
| Examiner Name        | J. Siew          |
| Art Unit             | 1637             |
| Attorney Docket No.  | 001107.00195     |

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None  
Order
☒ Deposit Account:Deposit  
Account  
Number

19-0733

Deposit  
Account  
Name

Banner &amp; Witcoff, LTD.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 770      | 2001         | 385      | Utility filing fee     |          |
| 1002         | 340      | 2002         | 170      | Design filing fee      |          |
| 1003         | 530      | 2003         | 265      | Plant filing fee       |          |
| 1004         | 770      | 2004         | 385      | Reissue filing fee     |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |
| SUBTOTAL (1) |          |              |          |                        | (\$ ) 0  |

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

|                    |   |        |   |   |   |                |   |   |
|--------------------|---|--------|---|---|---|----------------|---|---|
| Total Claims       | 5 | -20 ** | = | 0 | X | Fee from below | = | 0 |
| Independent Claims | 3 | -3 **  | = | 0 | X |                | = | 0 |
| Multiple Dependent |   |        |   |   | X |                | = | 0 |

| Large Entity |          | Small Entity |          | Fee Description  |
|--------------|----------|--------------|----------|--|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |
| 1201         | 86       | 2201         | 43       | Independent claims in excess of 3                          |
| 1203         | 290      | 2203         | 145      | Multiple dependent claim, if not paid                      |
| 1204         | 86       | 2204         | 43       | ** Reissue independent claims over original patent         |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ ) 0

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

| Large Entity                        |          | Small Entity |          | Fee Description  | Fee Paid |
|-------------------------------------|----------|--------------|----------|--|----------|
| Fee Code                            | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051                                | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052                                | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet.                    |          |
| 1053                                | 130      | 1053         | 130      | Non-English specification  |          |
| 1812                                | 2,520    | 1812         | 2,520    | For filing a request for reexamination                                     |          |
| 1804                                | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805                                | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251                                | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252                                | 420      | 2252         | 210      | Extension for reply within second month                                    |          |
| 1253                                | 950      | 2253         | 475      | Extension for reply within third month                                     |          |
| 1254                                | 1,480    | 2254         | 740      | Extension for reply within fourth month                                    |          |
| 1255                                | 2,010    | 2255         | 1,005    | Extension for reply within fifth month                                     |          |
| 1401                                | 330      | 2401         | 165      | Notice of Appeal   |          |
| 1402                                | 330      | 2402         | 165      | Filing a brief in support of an appeal                                     |          |
| 1403                                | 290      | 2403         | 145      | Request for oral hearing   |          |
| 1451                                | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452                                | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453                                | 1,330    | 2453         | 665      | Petition to revive - unintentional   |          |
| 1501                                | 1,330    | 2501         | 665      | Utility issue fee (or reissue)   | 665      |
| 1502                                | 480      | 2502         | 240      | Design issue fee   |          |
| 1503                                | 640      | 2503         | 320      | Plant issue fee  |          |
| 1460                                | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807                                | 50       | 1807         | 50       | Processing fee under 37 CFR 1.17 (q)                                       |          |
| 1806                                | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021                                | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809                                | 770      | 2809         | 385      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810                                | 770      | 2810         | 385      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801                                | 770      | 2801         | 385      | Request for Continued Examination (RCE)                                    |          |
| 1802                                | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |
| Other fee (specify) Publication Fee |          |              |          |  | 300      |
| Advance Patent Copies               |          |              |          |  | 30       |

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 995

## SUBMITTED BY

## Complete (if applicable)

|                   |                       |                                   |                |           |                |
|-------------------|-----------------------|-----------------------------------|----------------|-----------|----------------|
| Name (Print/Type) | Sarah A. Kagan        | Registration No. (Attorney/Agent) | 32,141         | Telephone | (202) 824-3000 |
| Signature         | <i>Sarah A. Kagan</i> | Date                              | April 21, 2004 |           |                |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



001107-00195  
DOCKETED  
FEB 17 2004  
IF, Pub: PTA  
due: 5.13.04

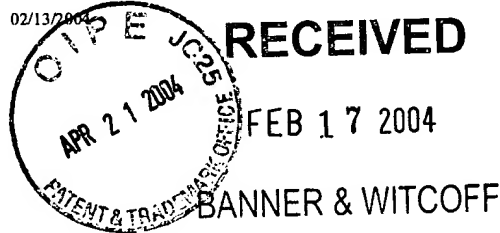
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SAK/MHS

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22907 7590  
BANNER & WITCOFF  
1001 G STREET N W  
SUITE 1100  
WASHINGTON, DC 20001



|                         |              |
|-------------------------|--------------|
| EXAMINER                |              |
| SIEW, JEFFREY           |              |
| ART UNIT                | PAPER NUMBER |
| 1637                    |              |
| DATE MAILED: 02/13/2004 |              |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/981,356      | 10/12/2001  | Bert Vogelstein      | 001107.00195        | 8732             |

TITLE OF INVENTION: DIGITAL AMPLIFICATION

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO           | \$1330    | \$300           | \$1630           | 05/13/2004 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☒ Applicant claims SMALL ENTITY status.  
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.